Agribusiness & Applied Economics Report No. 471 November 2001

Economic Analysis of the U.S. House of Representatives Farm Bill and Senate Agriculture Committee Farm Bill Proposal

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Acknowledgments

The authors extend appreciation to Dwight Aakre, Jeremy Mattson, and Andrew Swenson for their constructive comments and suggestions. Special thanks go to Ms. Carol Jensen, who helped to prepare the manuscript.

The research was conducted under the U.S.-Canada agricultural trade research program funded by U.S. Department of the Treasury/ U.S. Customs Service (Grant No. TC-00-001G, ND1301).

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Abstract

This study analyzes two farm bill proposals that would replace the Federal Agricultural Improvement and Reform Act: the U.S. House of Representatives Bill H.R. 2646 and the Senate Agriculture Committee proposal. Both proposals try to incorporate the additional emergency federal funding that agriculture received in 1998 through 2001 into legislative language.

Both proposals provide substantially higher net farm income than the continuation of the FAIR Act. Net farm income under the House bill is higher than under the Senate proposal given FAPRI's commodity price estimates. Regions of the state which produce row crops, corn, and oilseeds, would have higher net farm income under the Senate proposal. If commodity prices increase faster than FAPRI estimates, the House bill should provide more support because more of the governmental support is in the form of direct payments. However, if prices lag behind FAPRI's estimates, the Senate proposal should provide higher support because of the higher loan rates.

Key Words: Farm Bill, North Dakota Representative Farms, H.R. 2646, Senate Agriculture Committee Proposal

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Economic Analysis of the U.S. House of Representatives Farm Bill and Senate Agriculture Committee Farm Bill Proposal

Richard D. Taylor and Won W. Koo*

Introduction

This study analyzes two farm bill proposals that would replace the Federal Agricultural Improvement and Reform Act (FAIR Act) which the U.S. Congress passed in 1996: the U.S. House of Representatives Bill H.R. 2646 and the Senate Agriculture Committee proposal. Both proposals try to incorporate the additional emergency federal funding that agriculture received in 1998 through 2001 into legislative language. The FAIR Act was based on a number of assumptions, which history has proven incorrect. The FAIR Act was a departure from previous farm legislation. Payments were decoupled from production and the bill allowed additional planting flexibility for producers in response to market signals and was designed to reduce farmer reliance on federal government support by slowly reducing government payments over the life of the farm bill.

Brief Summary of the Alternative Farm Bill Proposals

The House Committee on Agriculture has passed H.R. 2646. It proposes a number of changes in U.S. farm legislation. The legislation provides the continuation of planting flexibility, fixed payments, and a commodity marketing loan program. H.R. 2646 includes a countercyclical feature that is tied to market prices but not to current production. Oilseed marketing loan rates are reduced, but producers have the option to update their bases or use the existing bases and includes oilseed planting history for calculation of direct payments and countercyclical payments which are decoupled from current planting decisions.

Table 1 shows the adjusted loan rates and fixed payment levels proposed by H.R. 2646. The loan rates for wheat and corn are unchanged while the loan rates for barley are increased by $0.06 and soybeans are reduced by $0.34. Loan rates for minor oilseeds are reduced $0.60 per cwt. Fixed payments are increased for wheat, corn, and barley, while soybeans and minor oilseeds become eligible for the payments. The payments increase $0.07 per bushel for wheat, $0.04 per bushel for corn, and $0.05 per bushel for barley. The payment levels for soybeans and minor oilseeds are $0.42 per bushel and $0.74 per cwt, respectively.

The increases in fixed payments amount to $1.2 billion per year nationwide for the life of the proposal. Countercyclical payments provide an average of $3.9 billion per year for producers and additional marketing loan revenue is $0.26 billion per year.

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Table 1. Loan Rates and Fixed Payment for the House Farm Bill

Commodity		Loan Rates	Direct Payment Rates
		----------------------$------------------------	
Wheat	(bu)	2.58	0.53
Corn	(bu)	1.89	0.30
Soybeans	(bu)	4.92	0.42
Minor oilseeds	(cwt)	8.70	0.74
Barley	(bu)	1.65	0.25

The Senate proposal, sponsored by Senator Tom Harkin, would raise loan rates for commodities, continue fixed payments, add a countercyclical payment, and allow producers to update base acres and payment yields for determining fixed and countercyclical payments. Table 2 shows the proposed loan rates and direct payment rates. The Senate proposal would raise loan rates 16.3% for wheat (from $2.58 to $3.00), 10.1% for corn (from $1.89 to $2.08), 5.7% for soybeans (from $4.92 to $5.20), 20.7% for minor oilseeds (from $8.70 to $10.50), and 21.2% for barley (from $1.65 to $2.00). Direct payments would continue under the Senate proposal, but would decrease in future years. The Senate proposal is a five-year farm bill with the option of being renewed for another five years. The program yield and base acres could be updated for the years 1998 through 2001, although current yields and acres could be maintained. Direct payments under the Senate proposal are based on 100% of the base acres compared to 85% for H.R. 2646.

Table 2. Proposed Loan Rates and Direct Payment Rates of the Senate Farm Bill Proposal

Commodity		Loan Rate	Direct Payment Rate		
			2002/03	2004/05	2006
		----------------------------------$------------------------------------ -			
Wheat	(bu)	3.00	0.45	0.225	0.113
Corn	(bu)	2.08	0.27	0.135	0.068
Soybeans	(bu)	5.20	0.55	0.275	0.138
Minor oilseeds	(cwt)	10.50	1.00	0.500	0.250
Barley	(bu)	2.00	0.20	0.100	0.050

Method

For this analysis, the North Dakota Representative Farm model was used to evaluate the impacts of the two farm bill proposals on North Dakota farms. The model is described in Taylor, Koo, and Swenson. The model divides the state into four regions for the analysis, but only statewide results will be reported in the study. This analysis is based on the Food and Agricultural Policy Research Institute's (FAPRI) price forecasts for the commodities produced in the United States.

Results

Table 3 shows the commodity prices used in this study. These prices are based on FAPRI's price forecasts for U.S. commodities. The prices are expected to increase throughout the forecast period. The increasing prices, if they are accurate, will reduce government spending during the latter part of the forecast period. The nonrecourse loan rates provide a revenue floor per unit of production. The loan rates for H.R. 2646 are lower than those for the Senate proposal; however, the decoupled countercyclical payment is higher under the House bill. Initially, the fixed decoupled payments would be similar but would decline starting in 2004 under the Senate proposal, compared to the House bill. If prices tend lower than the forecasted prices, the Senate proposal will provide more support to agriculture because the marketing loan is on all current production while direct payments are based on past or historical production. If prices tend higher than the forecasted prices, the House bill will provide higher support because of the higher direct payments.

Table 3. North Dakota Prices Used in the Analysis

Year	S Wheat	D Wheat	Barley	Canola	Sunflowers	Soybeans	Corn
	--------------$/bu-----------------			-----------$/cwt---------		----------$/bu-----------	
2002	2.79	2.67	1.83	6.78	6.66	4.08	1.52
2003	2.89	2.82	1.84	7.04	7.05	4.21	1.54
2004	2.96	2.92	1.88	7.38	7.52	4.37	1.58
2005	3.03	3.02	1.93	7.60	7.87	4.47	1.65
2006	3.13	3.17	2.00	7.83	8.23	4.58	1.73
2007	3.22	3.30	2.07	8.15	8.65	4.72	1.79
2008	3.28	3.38	2.14	8.41	9.04	4.85	1.86
2009	3.36	3.50	2.20	8.64	9.39	4.96	1.92
2010	3.45	3.63	2.29	8.80	9.68	5.04	2.00

Tables 4 and 5 show the net farm income for the various size representative farms under the House bill and the Senate farm bill proposal. Both proposals are similar in the results, but the House version provides higher average income for the ten-year period for all size farms. Compared to the Senate proposal, the large size farms average $6,859, or about 6.6% more per year under the House bill. The medium size farms average $2,195, or about 3.7% more per year under the House bill, and the small size farms average $7 more per year under the House bill. The comparison is based on the FAPRI's price forecasts. If actual prices are lower than the forecasted prices, the Senate proposal may provide higher net farm income.

Table 4. Net Farm Income for North Dakota Representative Farms under the House Farm Bill

Year	Large	Medium	Small
	-----------------------$-----------------------		
2002	90,239	54,536	26,951
2003	117,454	64,806	29,647
2004	116,329	65,344	29,934
2005	114,926	64,817	29,271
2006	112,930	63,645	29,055
2007	104,830	60,853	28,253
2008	99,600	57,206	27,319
2009	99,257	57,741	27,452
2010	101,229	58,713	27,677
Avg	104,059	59,644	28,096

Table 5. Net Farm Income for North Dakota Representative Farms under the Senate Proposed Farm Bill

Year	Large	Medium	Small
	-----------------------$-----------------------		
2002	102,222	56,719	28,189
2003	112,704	63,784	30,671
2004	106,783	61,636	29,847
2005	101,932	59,588	28,597
2006	98,617	57,934	28,142
2007	92,410	56,028	27,557
2008	88,881	53,205	26,765
2009	87,736	53,436	26,629
2010	88,540	53,984	26,502
Avg	97,200	57,449	28,089

Net farm income for North Dakota representative farms under both proposals are shown in Figures 1 through 3. The House bill provides higher statewide average net farm incomes than the Senate proposal for all size farms throughout the forecast period.

There are some regional differences in the two proposals. In the Red River Valley and the South Central regions of the state, the Senate proposal provides higher net farm income than the House bill. However, in the North Central and the West regions, the House bill provides higher net farm income. The main reason for this is the differing crop mix that the regions produce. The Red River Valley and the South Central regions produce more corn and soybeans; the North Central region produces wheat, sunflowers, and canola; and the West region produces mainly wheat and barley. The ability to update the yield base under the Senate proposal is a large advantage to corn producers in the state. Average corn yields have increased from about 62 bu/acre in 1981-85 to about 112 bu/acre in 1998-2001. Other crop yields have increased but not to the extent of corn.

Summary

Both proposals provide substantially higher net farm income than the continuation of the FAIR Act. Net farm income under the House bill is higher than under the Senate proposal given FAPRI's commodity price estimates. Regions of the state which produce row crops, corn, and oilseeds, would have higher net farm income under the Senate proposal while areas which grow mainly small grains would benefit more from the House bill. If future commodity prices deviate from the price estimates, the results could change. If prices increase faster than FAPRI estimates, the House bill should provide more support because more of the governmental support is in the form of direct payments. However, if prices lag behind the FAPRI's estimates, the Senate proposal should provide higher support because of the higher loan rates.

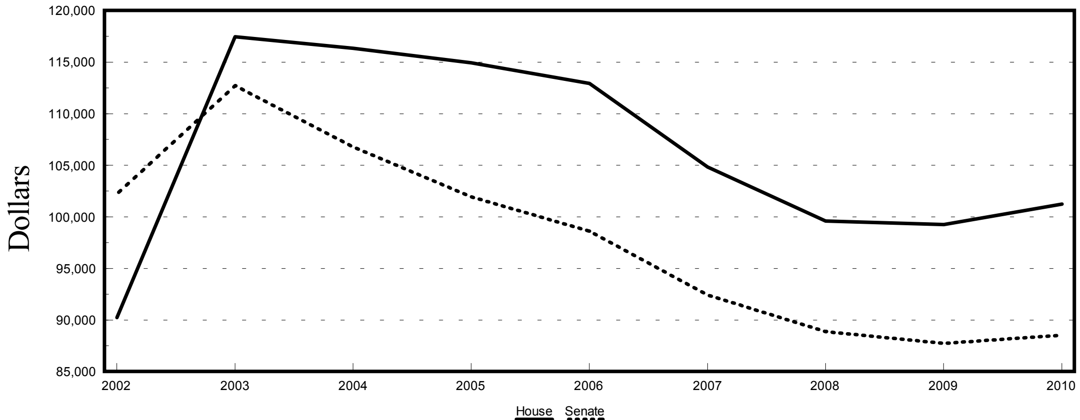

Figure 1 Net Farm Income For North Dakota Large Size Representative Farm

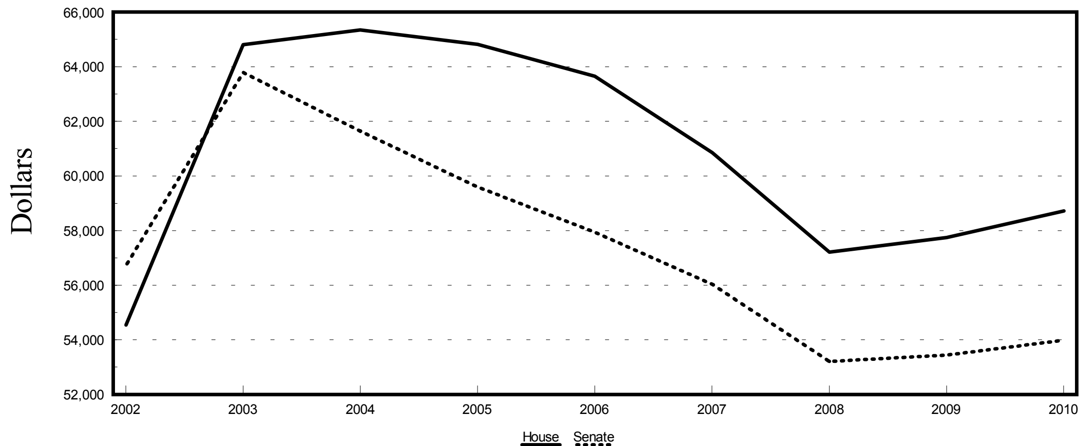

Figure 2 Net Farm Income For North Dakota Medium Size Representative Farm

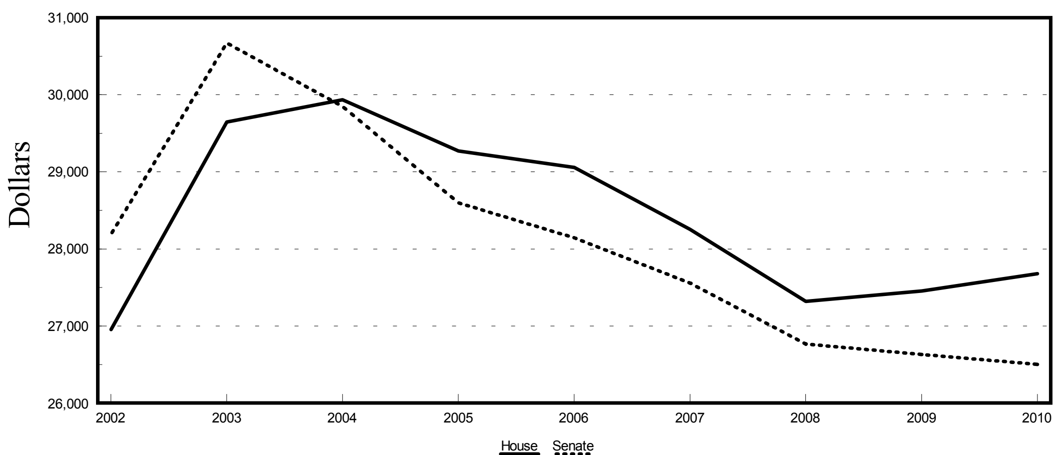

Figure 3 Net Farm Income For North Dakota Small Size Representative Farm

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